

Lake McBride Lake Vegetation Index Results (8-7-2013)

The Lake Vegetation Index score for Lake McBride was 70, placing the lake's vegetative community in the healthy category.

The Lake Vegetation Index (LVI) is a multi-metric index that evaluates how closely a lake's plant community resembles one that would be expected in a condition of minimal human disturbance. It is based on a rapid field assessment of aquatic and wetland plants as indicators of various effects of human disturbance over time. Plants respond to

physical disturbances such as introduction of exotic species or lakeshore alterations, and chemical disturbance such as introduction of excess nutrients, particulates, or herbicides from the surrounding land uses.

The LVI method is performed from a boat, and involves dividing a lake into 12 units and identifying plants in 4 of the 12 units. Plants are identified in the selected unit by a visual boat "drive by" and also via a transect approach. The resulting data is used to calculate the LVI and is evaluated according to the scoring system in Table 1. County staff are available to discuss this information as desired.

TABLE 1. Category names, ranges of values for LVI, and example descriptions of biological conditions typically found for that category.

<i>Aquatic life use category</i>	<i>LVI Range</i>	<i>Description</i>
Exceptional	78–100	Nearly every plant present is a species native to Florida, invasive taxa typically not found. About 30% of taxa present are identified as sensitive to disturbance.
Healthy	43–77	About 85% of plant taxa are native to Florida; invasive taxa present. Sensitive taxa have declined to about 15%.
Impaired	0–42	About 70% of plant taxa are native to Florida. Invasive taxa may represent up to 33% of total taxa. Less than 10% of the taxa are sensitive.

Seventy-one plant species were found during the survey. The native species, fanwort (*Cabomba caroliniana*), and watershield (*Brasenia schreberi*) were the most dominant plants in the lake followed by spatterdock (*Nuphar* sp.), fragrant waterlily (*Nymphaea odorata*) and bladderwort (*Utricularia* sp.). Other native shoreline vegetation included; red maple (*Acer rubrum*), buttonbush (*Cephalanthus occidentalis*) and pickerelweed (*Pontederia cordata*).

Unfortunately, wild taro (*Colocasia esculenta*), torpedo grass (*Panicum repens*) and Chinese tallow (*Sapium sebiferum*), all listed as Category I Invasive Exotics by the Florida Exotic Pest Control Council, are invasive exotics that are a concern in Lake McBride. A plant previously found in Lake McBride, hydrilla (*Hydrilla verticillata*), another Category I Invasive Exotic, was not found during this survey. Alligator weed (*Alternanthera philoxeroides*), a Category II Invasive

Exotic, was found for the first time in Lake McBride. Burhead sedge (*Scirpus cubensis*) was also found in Lake McBride and is especially prevalent on the tussocks found in and along the edges of the lake. Experts are in

disagreement about whether this species is a native or non-native to Florida.

For a complete list of plants found during the LVI survey, please see Table 2.

TABLE 2. Scientific and common names of the plants identified during the Lake McBride LVI survey (8-7-13).

Scientific Name	Common Name
<i>Acer rubrum</i>	red maple
<i>Alternanthera philoxeroides(II)</i>	alligator weed
<i>Andropogon virginicus</i>	broomsedge bluestem
<i>Bacopa caroliniana</i>	lemon Bacopa
<i>Bidens mitis</i>	smallfruit beggartick
<i>Boehmeria cylindrica</i>	false nettle
<i>Brasenia schreberi</i>	watershield
<i>Cabomba caroliniana</i>	fanwort
<i>Carex lurida</i>	shallow sedge
<i>Cephalanthus occidentalis</i>	buttonbush
<i>Ceratophyllum demersum</i>	coontail
<i>Colocasia esculenta(I)</i>	wild taro
<i>Cyperus odoratus</i>	fragrant flatsedge
<i>Cyperus ovatus</i>	pinebarren flatsedge
<i>Cyrilla racemiflora</i>	swamp titi
<i>Decodon verticillatus</i>	swamp loosestrife
<i>Diospyros virginiana</i>	common persimmon
<i>Dulichium arundinaceum</i>	three-way sedge
<i>Eclipta alba (E. prostrata)</i>	false daisy
<i>Eleocharis baldwinii</i>	road-grass
<i>Eleocharis equisetoides</i>	jointed spikesedge
<i>Erechtites hieracifolia</i>	American burnweed
<i>Eupatorium sp.</i>	Eupatorium
<i>Fuirena breviseta</i>	saltmarsh umbrella sedge
<i>Habenaria repens</i>	water spider orchid
<i>Hydrocotyle sp.</i>	water pennywort
<i>Hypericum hypericoides</i>	St. Andrew's cross
<i>Hypericum mutilum</i>	dwarf St. John's wort
<i>Juncus effusus</i>	common rush
<i>Juncus marginatus</i>	grassleaf rush
<i>Leucothoe racemosa</i>	sweetbells
<i>Limnobium spongia</i>	frog's bit
<i>Liquidamber styraciflua</i>	American sweetgum
<i>Ludwigia arcuata</i>	needleleaf ludwigia
<i>Ludwigia decurrens</i>	wingleaf primrose willow
<i>Ludwigia sp.</i>	primrose willow
<i>Lycopus rubellus</i>	taperleaf water horehound
<i>Mayaca fluviatilis</i>	stream bogmoss

<i>Mikania scandens</i>	climbing hempvine
<i>Myrica cerifera</i>	wax myrtle
<i>Myriophyllum heterophyllum</i>	twoleaf watermilfoil
<i>Nuphar sp.</i>	spatterdock
<i>Nymphaea odorata</i>	fragrant waterlily
<i>Nyssa sylvatica</i> var. <i>biflora</i>	swamp tupelo
<i>Panicum hemitomon</i>	maidencane
<i>Panicum repens</i>(I)	torpedo grass
<i>Pinus taeda</i>	loblolly pine
<i>Polygonum densiflorum</i>	denseflower knotweed
<i>Polygonum punctatum</i>	dotted smartweed
<i>Pontederia cordata</i>	pickerelweed
<i>Potamogeton illinoensis</i>	Illinois pondweed
<i>Quercus nigra</i>	water oak
<i>Quercus virginiana</i>	southern live oak
<i>Rhexia mariana</i>	Maryland meadowbeauty
<i>Rhynchospora cephalantha</i>	bunched beaksedge
<i>Saccharum giganteum</i>	sugarcane plumegrass
<i>Sagittaria filiformis</i>	threadleaf arrowhead
<i>Sagittaria latifolia</i>	broadleaf arrowhead
<i>Salix carolina</i>	coastal plain willow
<i>Salvinia minima</i>	water spangles
<i>Sapium sebiferum</i>(I)	Chinese tallow tree
<i>Scirpus cubensis</i>	burhead sedge
<i>Scirpus cyperinus</i>	woolgrass
<i>Solidago sp.</i>	goldenrod
<i>Taxodium ascendens</i>	pond cypress
<i>Toxicodendron radicans</i>	eastern poison ivy
<i>Triadenum virginicum</i>	Virginia marsh St. John's wort
<i>Typha sp.</i>	cattail
<i>Utricularia purpurea</i>	eastern purple bladderwort
<i>Utricularia subulata</i>	zigzag bladderwort
<i>Vitis rotundifolia</i>	muscadine
<i>Xyris jupicai</i>	Richard's yellow-eyed grass

I- Category I Invasive Exotics

II- Category II Invasive Exotics

For additional information about the LVI, please review the Florida Department of Environmental Protection's [LVI Primer document](#).

For additional information about Category I and II invasive exotic plants, please visit the [Florida Exotic Pest Plant Council](#) webpage.

For more detailed information about the above species, please visit the [Atlas of Florida Vascular Plants](#) website.